

# Asthma in Michigan 2010: • A Blueprint for Action •

**A Strategic Plan for Improving Asthma Treatment  
and Self-Management Through System Level Interventions  
2005-2010**

Recommendations of the Asthma Initiative of Michigan In Partnership with the  
Michigan Department of Community Health and  
The American Lung Association of Michigan





The Asthma Initiative of Michigan (AIM) is a collaborative effort involving multiple partners from the public and private sectors across the state to reduce the burden of asthma in Michigan. AIM is supported by

staff from the Michigan Department of Community Health, the Michigan Public Health Institute, and the American Lung Association of Michigan. The strength of AIM comes from its member partners, including 14 local asthma coalitions, the Michigan Consortium of Asthma Coalitions, and the Michigan Asthma Advisory Committee and its work groups. AIM activities are coordinated through the Michigan Asthma Communication Network, including its website, [www.GetAsthmaHelp.org](http://www.GetAsthmaHelp.org). AIM developed the goals, objectives, and strategies in this strategic plan to guide its activities for the next five years.



The Michigan Department of Community Health strives to create a healthier Michigan by promoting access to the broadest possible range of services and taking steps to prevent disease, promote wellness and improve quality of life, all in a fiscally responsible manner.



The mission of the American Lung Association of Michigan is the prevention of lung disease and the promotion of lung health. In our second century, the American Lung Association of Michigan will expand our research commitment, strengthen our advocacy programs

and give the public, patients and caregivers the information and knowledge they need to breathe easier.

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## Acronym List

<b>5 A’s</b>	Ask, Advise, Assess, Assist, Arrange	<b>MDCH</b>	Michigan Department of Community Health
<b>AIM</b>	Asthma Initiative of Michigan	<b>MDI</b>	Metered Dose Inhaler
<b>AIR Course</b>	Asthma Information Review Course	<b>MHHA</b>	Michigan Health and Hospital Association
<b>ALAM</b>	American Lung Association of Michigan	<b>MIOSHA</b>	Michigan Occupational Safety and Health Administration
<b>CAP</b>	Criteria Air Pollutant	<b>MQIC</b>	Michigan Quality Improvement Consortium
<b>DEQ</b>	Department of Environmental Quality	<b>MSRC</b>	Michigan Society for Respiratory Care
<b>ED</b>	Emergency Department	<b>NAAQS</b>	National Ambient Air Quality Standards
<b>EPA</b>	Environmental Protection Agency	<b>NAECB</b>	National Asthma Educator Certification Board
<b>HP 2010</b>	Healthy People 2010	<b>NAEPP</b>	National Asthma Education and Prevention Program
<b>HUD</b>	United States Department of Housing and Urban Development	<b>NHLBI</b>	National Heart, Lung, and Blood Institute
<b>IAQ</b>	Indoor Air Quality	<b>NRT</b>	Nicotine Replacement Therapy
<b>ICS</b>	Inhaled Corticosteroid	<b>PCP</b>	Primary Care Physician
<b>MAAC</b>	Michigan Asthma Advisory Committee	<b>WRA</b>	Work-Related Asthma
<b>MAHP</b>	Michigan Association of Health Plans		
<b>MARK</b>	Michigan Asthma Resource Kit		
<b>MCAC</b>	Michigan Consortium of Asthma Coalitions		

Dear Michigan Citizens:

In 2000, the first statewide strategic plan, Asthma in Michigan—A Blueprint for Action, outlined 24 recommendations to address asthma in the areas of public health infrastructure, surveillance, professional knowledge, access and coordination of care, environmental factors, and community action. The Asthma Initiative of Michigan (AIM) was formed to implement that plan. For the past five years, AIM has had considerable success in improving asthma care and reducing Michigan's burden of asthma. Based on these successes and lessons learned, the members of AIM have updated the strategic plan to fine tune and enhance their efforts.

It is our pleasure to support the Asthma Initiative of Michigan's second strategic plan, Asthma in Michigan 2010: A Blueprint for Action. The focus of the plan is on reducing the burden of asthma through elimination of asthma disparities and addressing barriers to asthma management in health care systems and other settings. Implementation of the goals and objectives of this plan should result in improved quality of life and reduction of severe events for those with asthma.

We extend our thanks and gratitude to the individuals who worked on the development of this plan. These dedicated volunteers provided their time and expertise to improve the lives of people with asthma in Michigan.

Sincerely,



Janet Olszewski  
Director  
Michigan Department of Community Health



Rose Adams  
CEO, American Lung Association  
of Michigan

# Asthma Scenarios

Just after midnight on a Friday in early October, Kimberly started to feel a little short of breath. She knew it was her asthma because she had been dealing with it for fourteen years, since she was two. She hadn't been taking her steroid inhaler for the last week because she was afraid she'd look "puffy" for the upcoming homecoming dance, but had been feeling okay. Kim knew she should take her rescue medication, but wasn't sure where it was, and she felt too tired to look for it. She flipped on the TV and tried to relax— sometimes that worked to help her breathe better. Kim had toughed it out before and was sure she'd be fine by morning.

At six a.m., Kim's mom, Joelle, went to the kitchen and turned on the coffee maker. She heard the TV on, and as she walked into the family room, she found Kim kneeling on the floor with her arms out, cold to the touch. Joelle called 911 immediately and tearfully tried to rouse her daughter. The paramedics were there in 12 minutes, quickly intubating Kim and starting CPR. At the hospital, Kim was given life-saving drugs and CPR for 45 more minutes, and was then declared dead. A stunned Joelle later said she had never even thought about Kim dying from asthma, but had been worried about her taking a steroid inhaler.



In a neighboring town, 12-year-old Jamal was getting ready for school, singing along with the radio while he dressed. He thought about how well his football team was doing, and how great it felt to run all the way down the field without stopping to catch his breath. Football practice was right after school, so he packed his equipment and rescue inhaler in his bag. After breakfast, his dad, Dwayne, reminded him to check his peak flow and use his steroid inhaler. Jamal didn't really like to take medicine every day, but he remembered when he hadn't been able to catch his breath at summer football camp, and his scary trip to the emergency department. He and his parents had gone to an asthma education class after that, and the doctor had made sure Jamal knew what to do to keep his asthma under control. He grabbed his lunch and sports bag, and caught the bus to school. Later that morning, Dwayne's boss asked about Jamal, and he smiled as he told her about Jamal's touchdown at last week's game.



Both scenarios are based on true stories. Asthma symptoms are preventable and controllable with proper medical care. The Asthma Initiative of Michigan envisions a future with fewer emergency department visits, hospitalizations and asthma deaths through education and improved systems of care. This future grows from our *"Asthma in Michigan 2010: A Blueprint for Action."*

## Section 1



Asthma is a chronic condition in the lungs that has two main components: constriction—the tightening of the muscles surrounding the airways, and inflammation—the swelling and irritation of the airways. Constriction and inflammation

cause narrowing of the airways, which may result in symptoms such as wheezing, coughing, chest tightness, or shortness of breath. Furthermore, if not treated appropriately, asthma can cause long-term loss of lung function and severe outcomes, such as hospitalizations and even death.

Asthma cannot be cured, but it can be controlled. With appropriate disease management, people with asthma can prevent asthma symptoms during the day and night and maintain normal activity levels. People whose asthma is adequately managed should not experience sleep disruption or miss days of school or work because of their asthma. Finally, they should have minimal need for emergency department visits or hospitalizations because of their asthma.

### The Goals of Asthma Therapy

- ◆ Minimal or no chronic asthma symptoms, day or night.
- ◆ No limitations on activities; no school/work missed because of asthma.
- ◆ Minimal to no recurrent exacerbations of asthma; no emergency department visits or hospitalizations.
- ◆ Minimal use of inhaled short acting beta 2-agonist (<1 time per day; <1 canister per month).
- ◆ Normal or near-normal lung function.
- ◆ Minimal or no adverse side effects from medications.
- ◆ Satisfaction with asthma care.

Centers for Disease Control and Prevention. Key Clinical Activities for Quality Asthma Care: Recommendations of the National Asthma Education and Prevention Program. MMWR 2003; 52(RR-6):7.

To achieve these goals, efforts must be taken across the systems of asthma care, including both the health care provider and the asthma patient. From national guidelines, key clinical activities have been identified for the provision of quality asthma care.

(See box to right)

Asthma presents a significant challenge in Michigan. There are over 230,000 children and over 700,000 adults who currently

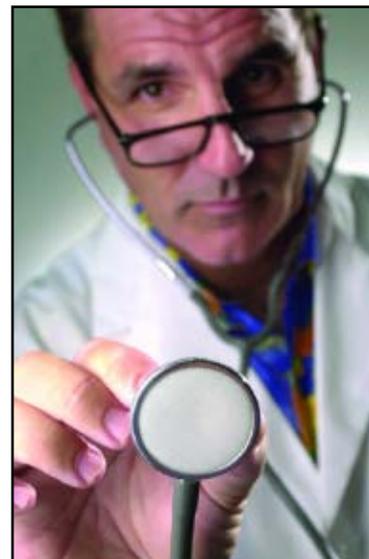
have asthma.<sup>1</sup> The disease costs approximately \$224 million in direct medical costs alone, and an additional \$170 million in indirect costs.<sup>2</sup> Not all people with asthma in Michigan are receiving treatment according to the national guidelines. Consequently, preventable symptoms and events, like hospitalizations and death, continue to occur.

In the following pages, a summary of Michigan's asthma burden is described, highlighting asthma disparities and progress toward meeting the goals of asthma therapy, standards of asthma care, and the *Healthy People 2010* asthma targets.

### Key Clinical Activities for Providing Quality Asthma Care

- ◆ Establish asthma diagnosis and classify severity of asthma.
- ◆ Schedule routine follow-up care: at least every 1-6 months and spirometry at least every 1 to 2 years.
- ◆ Assess for referral to specialty care.
- ◆ Recommend measures to control asthma triggers.
- ◆ Treat/prevent comorbid conditions, including providing annual influenza vaccination.
- ◆ Prescribe medications according to severity, including appropriate medication delivery and monitoring devices.
- ◆ Monitor use of beta 2-agonist drugs—reevaluate patients using more than 1 canister per month.
- ◆ Develop a written asthma management plan.
- ◆ Provide routine education on patient self-management.

Centers for Disease Control and Prevention. Key Clinical Activities for Quality Asthma Care: Recommendations of the National Asthma Education and Prevention Program. MMWR 2003; 52(RR-6):3.



# Asthma in Michigan is Not Well Controlled

**Evidence from Michigan's asthma surveillance system suggests that asthma is poorly managed and therefore the goals of therapy cannot be realized.**

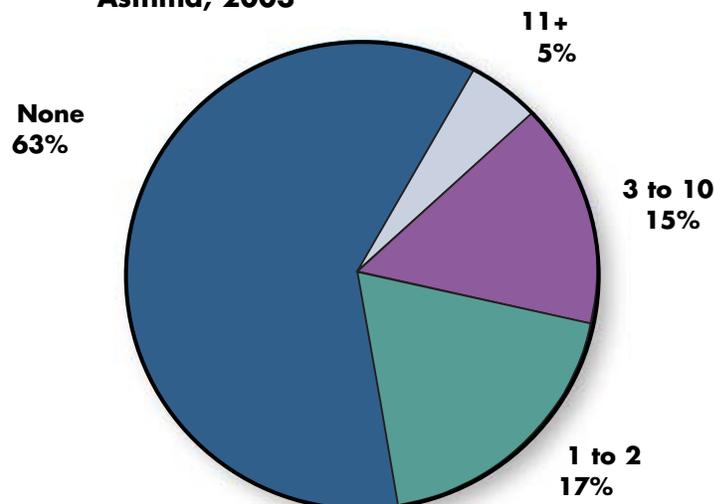
**Routine Care:** Only 30% of adults with asthma in Michigan have the recommended minimum two visits per year with a health care provider for routine asthma care.<sup>1</sup> In 2003, about 64% of people age 5 to 65 years in Medicaid with persistent asthma filled at least one prescription for appropriate asthma medicine—a long-term controller medicine.<sup>3</sup>

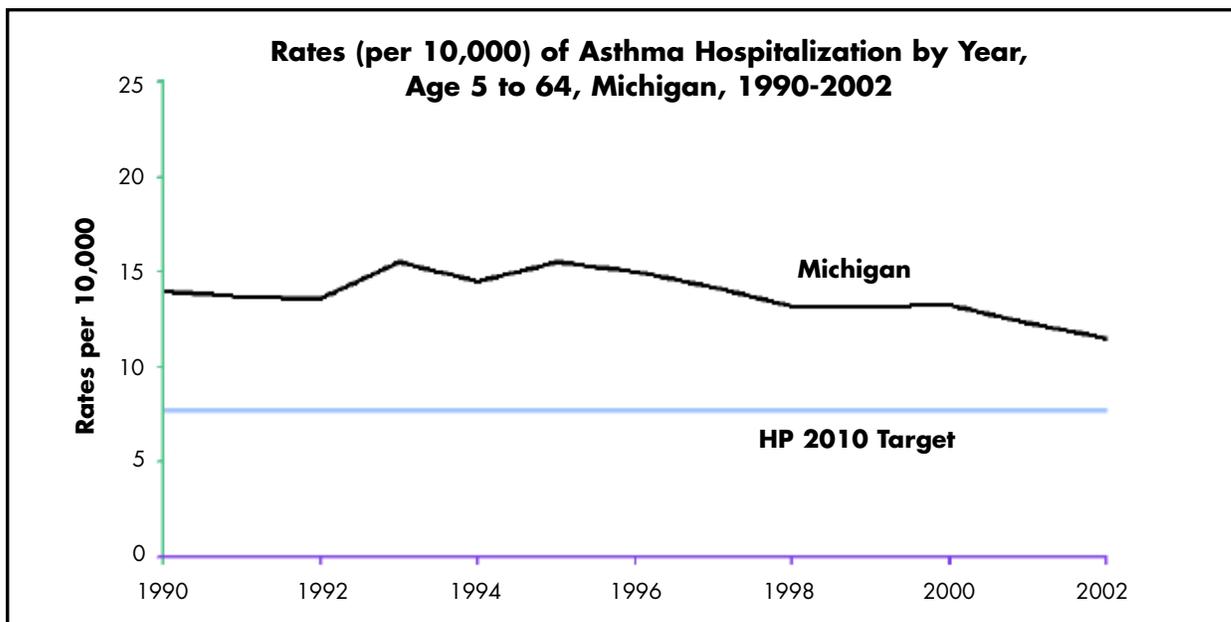
**Symptoms and Attacks:** People with asthma in Michigan frequently experience symptoms. Among middle and high school age children who have been told in their lifetime that they have asthma, about 35% have had an asthma attack in the past year.<sup>4</sup> For adults who currently have asthma, 53% have had an attack in the past year and about 20% experience symptoms *daily*.<sup>1</sup>

For Michigan adults with asthma, over 20% experience 3 or more nights of disrupted sleep due to asthma symptoms in a given month.<sup>1</sup>



**Frequency of Sleep-Disturbing Symptoms in the Past 30 Days for Michigan Adults with Asthma, 2003**





**Severe Events:** Poor management can lead to severe asthma events, such as emergency department visits, hospitalizations, and even death. Most of these events are preventable.

The *Healthy People 2010* initiative sets 80 asthma emergency department visits per 10,000 population among those less than five years of age as one of its goals for the nation to reach by the end of the decade. For children in this age group enrolled in Medicaid with full coverage and no other insurance, the rate of emergency department visits is 290 per 10,000.<sup>5</sup> For adults with asthma in the general population of Michigan, 16.4% have visited the emergency department at least once in a given year.<sup>1</sup>

For those 5 to 64 years, the *Healthy People 2010* target rate for asthma hospitalizations is 7.7 per 10,000. Hospitalizations for asthma for this age group occur at an alarming rate in Michigan, significantly higher than the *Healthy People 2010* target.<sup>6</sup>

In 2002, the rate of asthma hospitalizations for those 5 to 64 years was 11.5 per 10,000— significantly higher than the *Healthy People 2010* target of 7.7 per 10,000.<sup>6</sup>

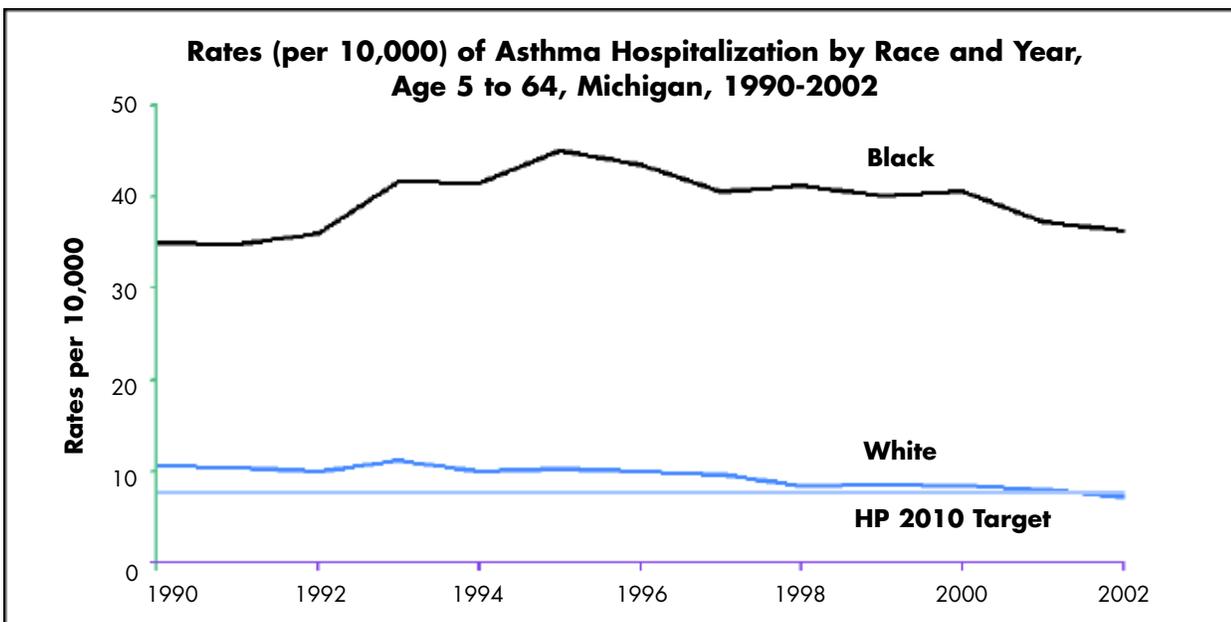


# Disparities in Asthma Burden Persist

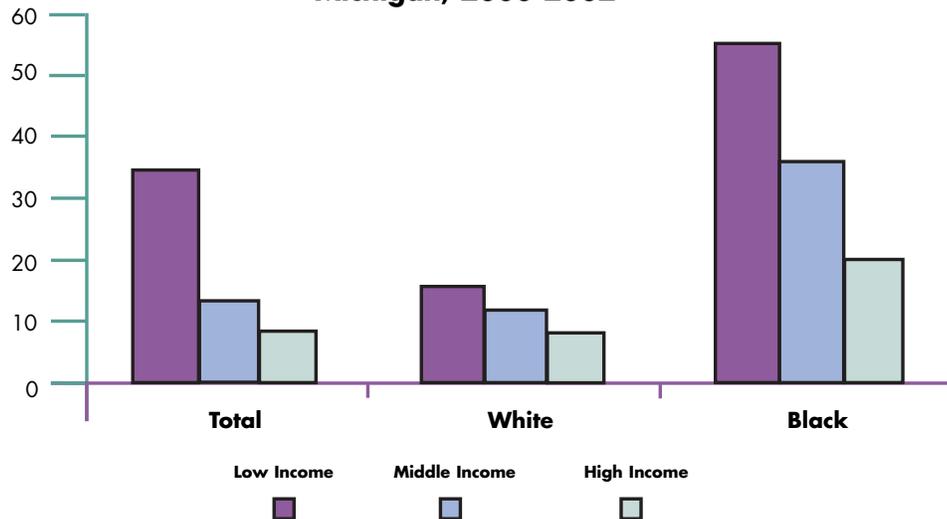
Of the two overriding goals of the *Healthy People 2010* initiative, one is to eliminate health disparities among different segments of the population. The burden of asthma in Michigan is disproportionately distributed across age, race, income, and geographic region. Specifically, asthma unevenly affects blacks, people of low income level, people living in urban centers, and children, particularly those under five years of age. Efforts to reduce the burden of asthma in Michigan must address these dramatic disparities.



Since 1990, there has been a significant overall decline in asthma hospitalization rates for whites. Among blacks, the rates over time are generally constant. The disparity between whites and blacks increases during this time period, with an over 2 fold increase between 1990 and 2002.<sup>6</sup>

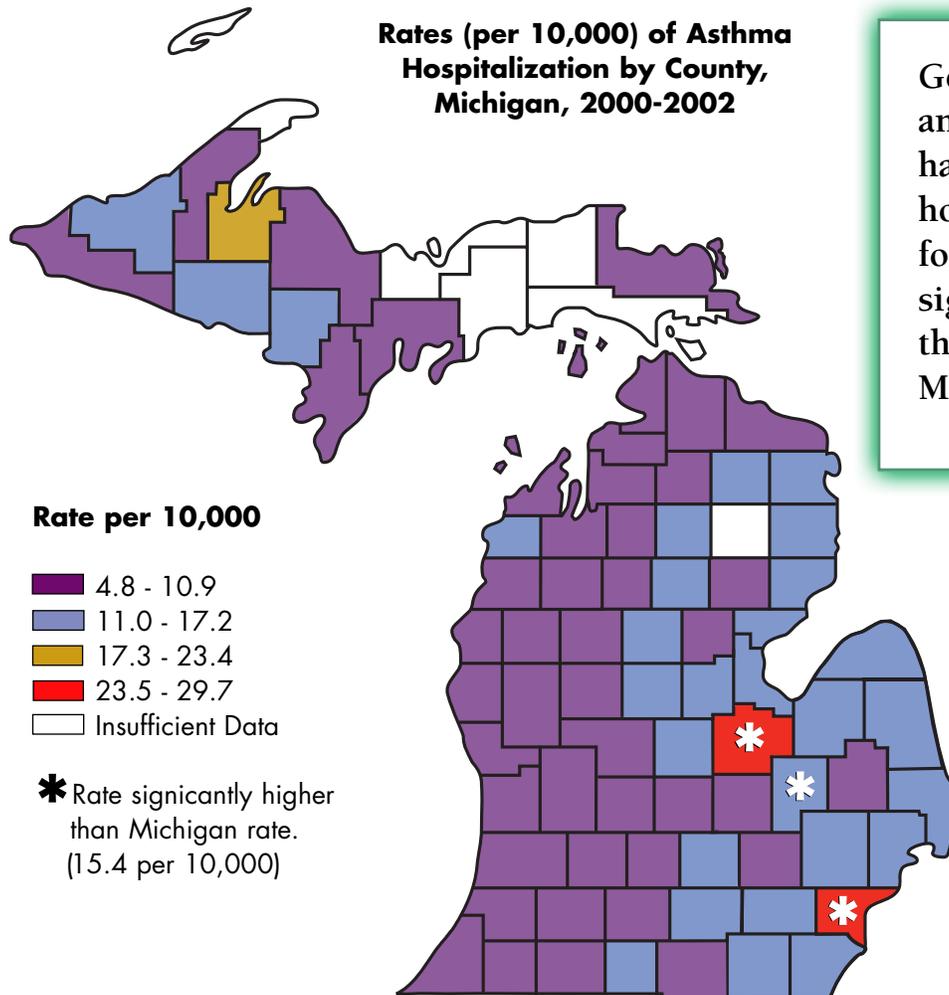


**Rates (per 10,000) of Asthma Hospitalization by Race and Income, Michigan, 2000-2002**



As area income levels increase, the asthma hospitalization rate decreases, regardless of race. This gradient is even more pronounced among black persons in Michigan.<sup>6</sup>





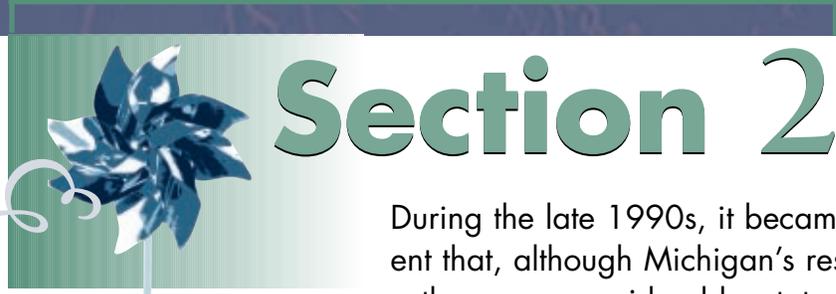
Genesee, Saginaw, and Wayne counties have the highest hospitalization rates for asthma that are significantly higher than the rate for Michigan as a whole.<sup>6</sup>

**For more information about asthma in Michigan, please visit the website,**

**[www.getastmahelp.org](http://www.getastmahelp.org)**

**Data Sources:**

1. Behavioral Risk Factor Survey, 2003, MDCH
2. 1998 Estimates developed at the Center for Health Services Research at the Rush Primary Care Institute. <http://www.aafa.org/display.cfm?id=6&sub=63&cont=142>, Accession Date: 07.14.2005
3. Michigan Medicaid HEDIS 2003 Statewide Aggregate Report
4. Youth Tobacco Survey, 2003, MDCH
5. Managed Care Production Encounters, FFS Paid Claims, Medicaid Beneficiary Files, Data Warehouse, MDCH, 2002
6. Michigan Inpatient Database, 1990-2002, MDCH



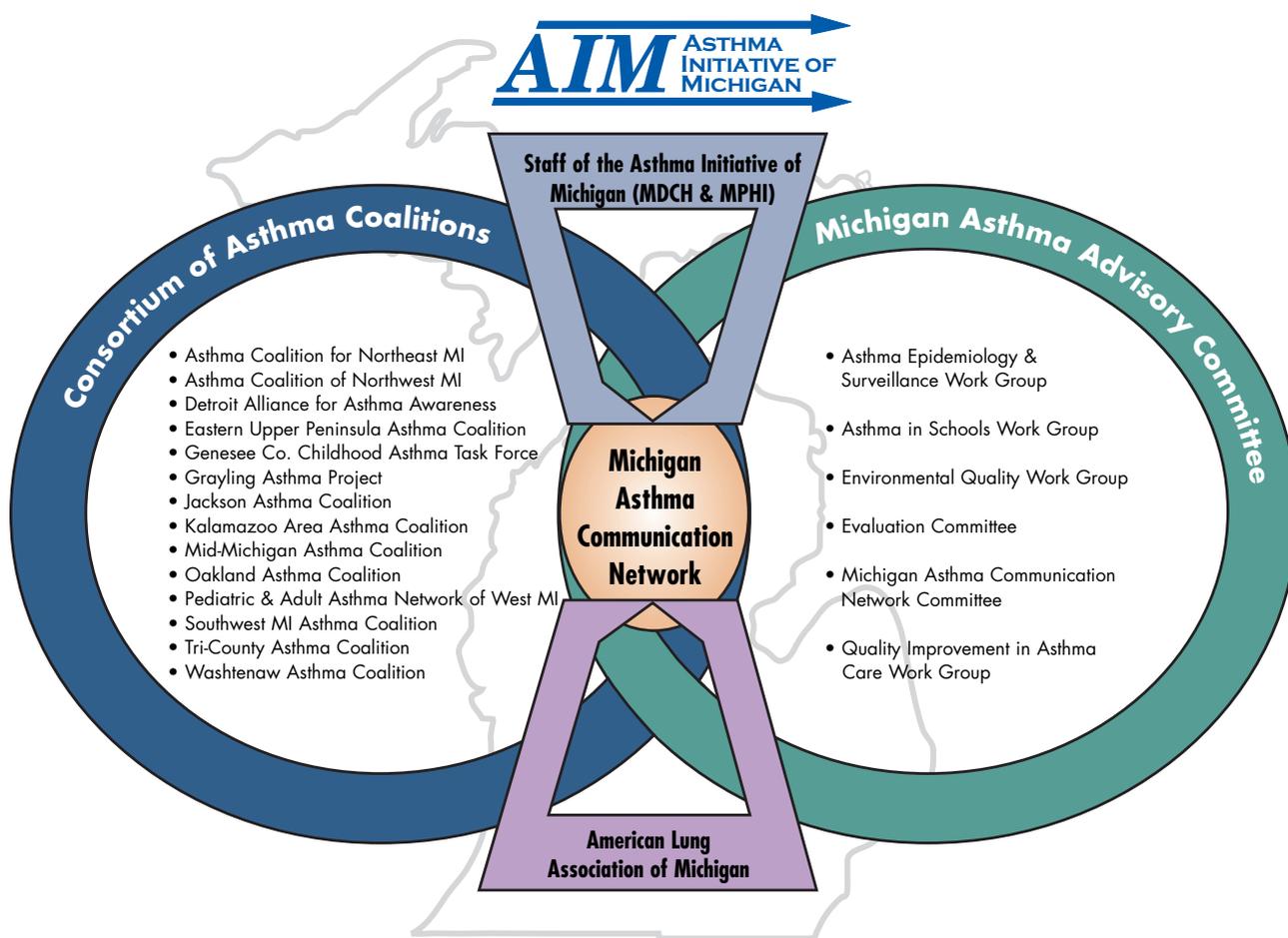
## Section 2

During the late 1990s, it became apparent that, although Michigan's response to asthma was considerable, statewide coordination would enable stakeholders to address common issues by collaboratively defining goals, objectives and strategies. To that end, the Michigan Department of Community Health (MDCH), in partnership with the Michigan Public Health Institute (MPHI) and the American Lung Association of Michigan (ALAM), launched an aggressive strategic planning effort. The result of countless hours of work by this planning task force was the first statewide strategic plan, ***Asthma in Michigan – A Blueprint for Action.***

The 24 recommendations in the May 2001 plan were organized into five areas:

- **Foundations of Asthma Activities:**  
describing the responsibilities of MDCH and local asthma coalitions, the development of the Michigan Asthma Communication Network (MACN), and needed improvements to the data and surveillance systems for tracking asthma in Michigan.
- **Training for Diagnosis, Management, and Education Services:**  
promoting the use of current standards of care, regionally-based networks of education activities, and distribution of consistent provider information regarding asthma resources.
- **Access to and Coordination of Health Care and Education Services:**  
recommending the development of consensus around cost-effectiveness of asthma strategies, improvement of access to high quality and culturally acceptable asthma care, and coordination of care across multiple settings and providers.
- **Environment:**  
improving indoor air quality in homes, schools, day care settings, and workplaces; reducing second hand smoke exposure, tobacco use, outdoor air exposures related to asthma; and addressing asthma in the workplace.
- **Community Action:**  
providing special summary recommendations on school and day care settings and raising public awareness of asthma.

The Asthma Initiative of Michigan (AIM) was formed to implement the *Blueprint for Action*, to reduce the burden of asthma for people in Michigan. AIM is a collaboration comprised of the Michigan Asthma Advisory Committee (MAAC) and its member organizations and the Michigan Consortium of Asthma Coalitions (MCAC) and the 14 member asthma coalitions, with staffing and facilitation provided by the MDCH, MPHI, and ALAM. Funding and support for AIM activities is provided by grants from the Centers for Disease Control and Prevention (CDC), state general funds, and generous donations of staff time, resources, and financial support from state and local organizations and individuals participating in AIM.



It has been five years since AIM began to implement the *Blueprint for Action* and the collective action of stakeholders across the state has made significant strides since that time.

**Highlights of milestones reached include:**

FOUNDATIONS OF ASTHMA ACTIVITIES	TRAINING FOR DIAGNOSIS, MANAGEMENT, & EDUCATION SERVICES	ACCESS TO & COORDINATION OF HEALTHCARE AND EDUCATION SERVICES	ENVIRONMENT	COMMUNITY ACTION
State program staffed; federal & state dollars obtained to support activities.	Michigan Asthma Resource Kit provided to over 1,000 health care providers statewide.	Coalitions implement programs to improve follow-up after severe asthma events.	USEPA's Tools for Schools program implemented in 4 Lansing schools and promoted in other districts.	Model asthma policy passed by State Board of Education & cited in national guidance documents.
The number of local asthma coalitions expands to 14, serving 38 counties.	<i>Taking On Asthma</i> materials distributed by Michigan Association of Health Plans to primary care providers statewide.	Asthma action plans and patient education materials available in multiple languages.	AIM supports successful smoke free ordinances in four communities. AIM participating in initiatives in other communities.	"Asthma – it's more serious than you think" packets developed for school faculty/staff & distributed to 1,000 schools.
Consortium of Asthma Coalitions forms, providing networking & collaborative action on local asthma issues. Biannual Coalition Summits held.	Michigan Quality Improvement Consortium Guideline for Asthma sent to primary care physicians statewide.	AIM members testify at Medicaid Pharmacy and Therapeutics Committee on impact of proposed formulary changes for long-acting beta agonists.	Smoke Free Homes pledges & radio campaign promoted in Communities of Color across the state.	Michigan Asthma Inhaler Law passed. Coalitions and AIM partners work to implement law in schools.
www.GetAsthmaHelp.org & 1-866-EZLUNGS information line up and running. Asthma Clearinghouse stocked. AIM newsletter distributed to over 300 partners each quarter.	Asthma Information Review courses available for allied health professionals across Michigan for four years.	AIM members participate in the Primary Care Initiative to improve the delivery system of primary care & asthma management.	Explored associations between asthma hospitalizations & air quality. Exploring associations between outdoor air quality and asthma utilization for Medicaid beneficiaries.	Asthma training incorporated into licensure training for day care providers across the state.
Surveillance system expands to include data on Medicaid clinical and pharmacy utilization, and childhood prevalence.	48 Michigan professionals are certified asthma educators (AEC).	MDCH Health Disparities Reduction Program funds asthma activities in local communities.	Outdoor air quality education materials distributed to people with asthma.	Asthma public service announcements aired & distributed to partners.
Reviewed asthma deaths in children & young adults to identify preventable factors. Recommendations shared with AIM partners.		MDCH Division of Immunization develops mechanism to remind patients and providers of need to vaccinate children with asthma and other chronic conditions against influenza.	MIOSHA staff, employers, & labor educated about work-related asthma.	Public service announcements about asthma & smoking aired in many languages.



## Section 3

In January 2004, the Michigan Asthma Advisory Committee (MAAC) decided that sustainability of asthma activities would be a priority for action in fiscal year 2005. As a result, the Sustainability Work Group was formed to develop a charge to sustain Michigan asthma activities, including developing a strategic plan for action to meet the *Healthy People 2010* asthma targets. The strategic plan incorporates lessons learned from the implementation of the original plan, described earlier.

The Sustainability Work Group includes diverse representation from the MAAC and the Michigan Consortium of Asthma Coalitions (MCAC). Five meetings were held between July 2004 and January 2005 to develop the plan's format, goal areas, and to provide guidance to work groups and coalition members who were developing the objectives and strategies of the plan.

The Sustainability Work Group developed a framework of six goals for the revised plan:

- **Identify and eliminate** asthma disparities in Michigan
- **Assess Michigan's asthma burden** to identify disparities, high-risk populations and trends
- **Support asthma awareness** and partnerships to address asthma in Michigan
- **Improve systems** of asthma care in Michigan
- **Reduce barriers** to self-management for people with asthma in Michigan
- **Reduce exposure** to environmental factors that cause and/or exacerbate asthma in Michigan

The MCAC and the existing MAAC work groups developed objectives, strategies, and performance indicators within each goal area over a three-month period. Each group prioritized proposed objectives and strategies based on their expected impact and feasibility. The Sustainability Work Group and asthma staff refined the document January through March 2005. Participants, stakeholders, and partners at the March 2005 MAAC meeting and the April 2005 meeting of MCAC reviewed the completed plan and gave staff suggested edits.



## Section 4

The stage for the next five years of action

has been set by the Asthma Initiative of Michigan (AIM): to develop partnerships and infrastructure, and to conduct successful activities. It's AIM's opportunity to build upon previous achievements through lessons learned during the implementation of the first strategic plan. These lessons learned will allow AIM to develop more effective interventions, remove barriers and to achieve positive asthma outcomes during the next five years. The overall purpose of activities in the next five years is to meet or surpass the ambitious *Healthy People 2010* asthma targets. In order to reach these targets, a major focus of this plan will include interventions that incorporate system change/policy development that directly targets asthma disparities.

System change and policy development can occur in many different settings, including the health care system, day cares, schools, worksites and public places. System changes and policy development can result in a broader lasting impact than interventions targeted at individual patients or providers.

Throughout the first strategic plan, the emphasis was on education of health care providers, people with asthma and parents of children with asthma. Education for these individuals is necessary, however, education alone has its limits. First, patients and providers can be appropriately educated, but they may not take the information and act upon it. Secondly, the impact of the education may be hindered by the system in which they are embedded. Therefore, an asthma friendly system allows providers and patients to give and receive the recommended care needed to properly manage asthma.

In the next five years, it is also essential that disparities be effectively addressed. This means to not only continue to gather existing data on asthma disparities, but to take action through effective programs to reduce the identified disparities. The focus on disparities is an ongoing commitment that will be considered for each planned activity conducted over the next five years.

Continued success of AIM is contingent upon a commitment to this five-year plan, including systems change, policy development and disparity reduction, by our partners, stakeholders and advocates. This commitment, including collaboration, has been the strength of AIM in the past and will need to continue to successfully implement this plan.

### **AIM learned many lessons since the development of the first Michigan Asthma Strategic Plan. Several principles guided the development of goals, objectives, and strategies for action over the next five years:**

1. The overall goal of AIM activities in the next five years is to **reach or surpass** the targets for asthma outcomes and care cited in the *Healthy People 2010* document.
2. Actions over the next five years need to **focus on changes to systems and policies**. Changes in the health care delivery system will significantly influence delivery of asthma care along the continuum of care, rather than ending with the individual or practice educated. Changes to systems and policies in schools, day care settings, work places, and public places will help to remove the barriers to good asthma management faced by people with asthma and their caregivers.
3. Asthma in Michigan varies by population factors such as age, race and ethnicity, socioeconomic status, geographic residence, education, and literacy levels. Even with recent national reductions in asthma mortality and other severe asthma events, asthma disparities persist at all levels. Activities must focus on **reducing disparities** affecting subpopulations in Michigan.
4. The goals, objectives, and strategies in this plan need to be **measurable** so AIM can evaluate the success of implementation and adjust activities accordingly.
5. Priority is given to activities that **fully utilize existing resources and partnerships** to ensure sustainability.
6. It must be feasible to **accomplish these activities in the next five years** (by 2010).



## Section 5

### Goal 1: IDENTIFY AND ELIMINATE ASTHMA DISPARITIES IN MICHIGAN.

Asthma burden and resources for its management are not evenly distributed in Michigan. Rates of severe asthma events are significantly higher among some minority and low-income populations in Michigan. For example, adults and children living in low-income areas are hospitalized for asthma at a rate four times that for their counterparts living in high-income areas. Similarly, black adults and children are hospitalized for asthma at a rate four times that for their white counterparts. Asthma deaths for black adults and children occur at a rate four to six times that for white adults and children. Since 1990, the gap between hospitalization and mortality rates for black and white populations increased as rates among whites improved. Rates for blacks remain unchanged.

Although these data are very useful for identifying some disparities in asthma outcomes, our information is severely lacking. Routine surveillance information is lacking for many groups in Michigan, including Hispanic, Asian, Pacific Islander, Native American, and Arab/Chaldean populations. In addition, no information is available on differences in asthma burden or care by primary language or literacy levels. Available data are usually not sufficient to calculate rates or evaluate change at local geographic levels, making it difficult to gauge the asthma burden in these communities. Most importantly, available surveillance data can be used to identify disparities, but provides little information into the factors causing the disparity.

National attention has been focused on addressing health disparities including asthma disparities. These efforts focus on a need to improve asthma care and management for everyone and the importance of being able to assess changes in management and care in all subgroups. These national materials and recommendations were considered in the development of Michigan's goals for reducing asthma disparities.

Implementation of this goal will raise awareness of asthma disparities in order to catalyze action to reduce disparities. Ultimately, these activities should increase equity in access to health care and enable all people with asthma in Michigan to reach *Healthy People 2010* targets for asthma. Everyone should receive quality asthma care and experience the best quality of life possible with asthma.

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U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. Washington, DC: U.S. Government Printing Office. 2000

## Goal 1: Objectives

### **1. Identify disparities in asthma burden and care in Michigan, exploring differences by age group, sex, race or ethnicity, income, education, insurance status, geographic residence, occupation, primary language, and literacy level.**

Performance Indicator:

- Surveillance reporting is available for all groups listed above, including local level analyses
- 

### **2. Raise awareness of the importance of addressing asthma disparities in Michigan.**

Performance Indicators:

- Information on asthma disparities is incorporated into AIM materials and activities
  - New partnerships are formed to address asthma disparities
  - AIM partners recognize the importance of addressing asthma disparities in Michigan
- 

### **3. Understand reasons for disparities and identify best practices for addressing disparities.**

Performance Indicators:

- Factors contributing to disparities in asthma care and severe events are understood for populations experiencing asthma disparities
  - AIM implements or adjusts activities to address factors causing disparities
- 

### **4. Ensure AIM activities include populations disparately affected by asthma.**

Performance Indicators:

- Local asthma coalitions, the Michigan Consortium of Asthma Coalitions, and Michigan Asthma Advisory Committee (MAAC) include representation and participation for populations experiencing asthma disparities
  - AIM materials and activities are reaching populations of greatest need
-

## **Goal 2:** ASSESS MICHIGAN'S ASTHMA BURDEN TO IDENTIFY DISPARITIES, HIGH-RISK POPULATIONS, AND TRENDS.

Michigan's asthma surveillance system has successfully described the burden of asthma with respect to prevalence, incidence of the most severe events, work-related asthma incidence, some triggers of asthma attacks, and certain aspects of disease management. However, gaps persist in our understanding of how asthma affects Michigan's population. Although certain racial, socioeconomic, and geographic disparities in asthma burden have been identified, the underlying cause of these disparities is not understood. These deficits impair our ability to effectively develop, target, and evaluate program activities.

It is the goal of the Asthma Initiative of Michigan (AIM) to further develop our surveillance to include data on quality of life, emergency department utilization, disease management, insurance benefits and policies related to asthma care, and other chronic lung disease. In addition, the reasons behind disparities in asthma will be explored. With a comprehensive asthma surveillance program, we expect to more fully characterize asthma in Michigan, direct program activities so that disparities in its burden are reduced, and measure the impact of our efforts.

## **Goal 2: Objectives**

### **1. Assess characteristics of asthma cases leading to death among Michigan children and adults.**

#### Strategy:

#### **A. Investigate and evaluate characteristics of asthma cases for all persons in Michigan that die due to asthma.**

##### Performance Indicators:

- Report of the expert panel's findings written and disseminated
  - Action taken based on recommendations of expert panel
- 

### **2. Assess the prevalence and incidence of asthma in Michigan.**

#### Strategies:

#### **A. Conduct surveillance of asthma prevalence for all persons in Michigan.**

##### Performance Indicator:

- Asthma prevalence estimated, interpreted, and disseminated
-

**B. Continue surveillance of the prevalence and incidence of work-related asthma for all persons in Michigan.**

Performance Indicators:

- Prevalence and incidence of work-related asthma estimated, interpreted, and disseminated
  - Action taken based on recommendations
- 

**3. Assess the health outcomes and impact of asthma in Michigan.**

Strategies:

**A. Conduct surveillance of asthma hospitalizations and mortality for all persons in Michigan.**

Performance Indicators:

- Rate of asthma hospitalizations and mortality estimated, interpreted, and disseminated
  - Program guided by or action taken from data
- 

**B. Conduct surveillance of asthma hospitalizations and emergency department visits in the Medicaid population, and other populations as identified.**

Performance Indicators:

- Incidence of asthma emergency department visits and hospitalizations for the Medicaid population estimated, interpreted, and disseminated
  - Rate of asthma emergency department visits and hospitalizations for commercially insured populations estimated, interpreted, and disseminated
  - Program guided by or action taken from data
- 

**C. Conduct and expand surveillance of the quality of life of persons in Michigan with asthma.**

Performance Indicators:

- Quality of life indicators for persons with asthma in Michigan estimated, interpreted, and disseminated
  - Program guided by or action taken from data
- 

**D. Design and initiate a pilot surveillance project of chronic obstructive pulmonary disease (COPD) for all persons in Michigan.**

Performance Indicators:

- Feasible surveillance protocol for COPD devised
  - Available outcomes related to COPD estimated, interpreted, and disseminated
-

**E. Improve the reliability and completeness of data collected for available data sets.**

Performance Indicators:

- Improved reliability and completeness of race/ethnicity data in the Michigan Inpatient Database
  - Improved reliability and completeness of race/ethnicity data in the managed care data sets
- 

**F. Design and implement a method for conducting surveillance of emergency department utilization for asthma for all persons in Michigan.**

Performance Indicators:

- Established system for collecting ED data statewide
  - Number and rates of asthma emergency department visits estimated, interpreted, and disseminated
  - Program guided by or action taken from data
- 

**G. Explore reasons for disparities in the health outcomes and impact of asthma in Michigan to identify effective strategies to reduce disparities.**

Performance Indicators:

- An understanding among AIM members of potential reasons for disparity in Michigan's asthma burden
  - Program guided or action taken based on this activity
- 

**4. Assess asthma management in Michigan.**

Strategies:

**A. Conduct surveillance of self-management of persons in Michigan with asthma.**

Performance Indicators:

- Self-management indicators for persons with asthma estimated, interpreted, and disseminated
  - Program guided by or action taken from data
- 

**B. Design and initiate surveillance of existing asthma-related policies and insurance benefit coverage in support of specific AIM activities.**

Performance Indicators:

- Feasible surveillance protocol for asthma-related policies developed and implemented with results estimated, interpreted and disseminated
- Feasible surveillance protocol for asthma-related health insurance benefits developed and implemented with results estimated, interpreted and disseminated
- Program guided by or action taken from data

**C. Design and initiate surveillance of quality of care received by persons with asthma.**

Performance Indicators:

- Feasible surveillance protocol for quality of asthma care developed
  - Quality of asthma care indicators estimated, interpreted, and disseminated
  - Program guided by or action taken from data
- 

**D. Explore reasons for disparities in asthma management in Michigan to identify effective strategies to reduce disparities.**

Performance Indicators:

- AIM members understand potential reasons for disparity in asthma management
  - Program guided or action taken based on this activity
- 

**Goal 3: SUPPORT ASTHMA AWARENESS AND PARTNERSHIPS TO ADDRESS ASTHMA IN MICHIGAN.**

People with asthma, their caregivers, and those who work to improve their lives, continue to need systems to learn about asthma and communicate with each other. Existing systems of communication (e.g., GetAsthmaHelp.org website) and asthma coalitions provide initial structure as the Asthma Initiative of Michigan (AIM) implements system changes and addresses the asthma issues of disparate populations.

Program redundancy, inadequate initiatives, and loss or mishandling of key relationships are negative outcomes from communication insufficiencies. In order to make key changes that affect many people, and particularly changes that would reduce asthma disparities, communication between partners, people with asthma and stakeholders must remain a high priority, and new ways to incorporate communication tools into our initiatives must be created. Michigan's asthma coalitions are resources for AIM and other organizations, and they provide a link to a large number of communities across Michigan. Local asthma coalitions recognize that they need to maintain a certain level of membership and productivity in order to be effective, so they can strengthen each other through collaboration and learning opportunities, and so they can help provide resources to areas of the state not covered by a coalition.

When this goal has been accomplished, AIM expects to have improved its communication systems with connections to consumers, partners and stakeholders. The Michigan Asthma Advisory Committee (MAAC), local asthma coalitions and the Michigan Consortium of Asthma Coalitions (MCAC) will be stronger partners with each other and with AIM organizations. Also, areas of the state without coalition coverage will have received information about where and how to find asthma resources when needed.

## Goal 3: Objectives

### 1. Facilitate communication between existing AIM partners, including the MAAC and its work groups and member organizations, the MCAC, and the local asthma coalitions.

#### Strategies:

#### **A. Develop an AIM section on the GetAsthmaHelp.org website to provide communication between work groups, coalitions, and member organizations.**

##### Performance Indicators:

- Improved communication, as measured by number of hits on AIM section pages
  - Improvement on communication section of MAAC survey
- 

#### **B. Actively target specific communications to AIM members.**

##### Performance Indicators:

- Number/topic of outgoing messages to AIM members in communication log
  - Communication sections of MAAC and Summit surveys indicate adequate/improved communication
- 

#### **C. Evaluate usefulness of current structure and content of GetAsthmaHelp.org website.**

##### Performance Indicator:

- Website updated in light of MAAC evaluation results and brief online satisfaction survey
- 

### 2. Increase awareness of asthma management strategies and resources among people with asthma, their families and caregivers.

#### Strategies:

#### **A. Facilitate communication with AIM interventions, key messages and resources to people with asthma, their families and caregivers, targeting disparate populations.**

##### Performance Indicators:

- Increase in number of people with asthma reached
  - Increase in number of people requesting specific AIM materials/services
-

**B. Continue to distribute AIM marketing materials to people with asthma and their caregivers.**

Performance Indicators:

- Increase in number of hits/users to website
  - Increase in number of people asking for AIM newsletter or materials
- 

**C. Evaluate usefulness of current structure and content of GetAsthmaHelp.org website.**

Performance Indicators:

- Website updated in light of evaluation results
  - Increase in number of hits/users to website
- 

**3. Increase awareness of asthma among stakeholders (e.g., employer groups, unions, other health coalitions, schools and child care providers) and foster collaborative relationships to improve asthma management in Michigan.**

Strategies:

**A. Facilitate communication about AIM interventions, key messages and resources with stakeholders.**

Performance Indicators:

- Increase in number and diversity of stakeholders reached
  - Increase in stakeholder participation in AIM interventions
- 

**B. Market AIM materials to stakeholders.**

Performance Indicators:

- Increase in number of hits/users to website
  - Increase in number of requests for newsletter or other communications
  - Increased number of stakeholders distributing AIM materials
- 

**C. Evaluate usefulness of current structure and content of GetAsthmaHelp.org website for stakeholders.**

Performance Indicators:

- Website updated in light of evaluation results
  - Increase in number of hits/users to website
-

#### **4. Increase public awareness of asthma and efforts to reduce its burden.**

##### Strategy:

##### **A. Support efforts to craft key messages for general public and assist in distribution by partners and stakeholders.**

###### Performance Indicator:

- Number of people reached
- 

#### **5. Enhance effectiveness of the Michigan Asthma Advisory Committee to improve the health and quality of life for people affected by asthma in Michigan.**

##### Strategies:

##### **A. Provide advice and guidance on the implementation of the strategic plan, *Asthma in Michigan 2010: A Blueprint for Action*, including periodic review and revision.**

###### Performance Indicator:

- Action taken on all objectives of the plan
- 

##### **B. Foster partnerships to implement specific AIM activities.**

###### Performance Indicator:

- Increase in number of MAAC member organizations collaborating in AIM activities
- 

##### **C. Strengthen membership of the MAAC including representation from populations experiencing asthma disparities.**

###### Performance Indicator:

- Active and diverse membership as shown by 75% attendance at all meetings
- 

##### **D. Educate policy makers in the private and public sectors about AIM activities.**

###### Performance Indicators:

- Awareness of specific asthma issues
  - Increase in asthma-friendly policies in Michigan at state and local levels
-

**E. Obtain funding and resources to sustain AIM activities.**

Performance Indicators:

- Adequate funding base
  - Diversity of grant funding
- 

**6. Enhance effectiveness of the Michigan Consortium of Asthma Coalitions to reduce the burden of asthma.**

Strategies:

**A. Educate policymakers about asthma and asthma-related activities.**

Performance Indicator:

- Increase in number of local/state policymakers aware of asthma
- 

**B. Strengthen knowledge and infrastructure of the Consortium through trainings on grant writing, evaluation, cultural competency, evidence-based interventions, and coalition building.**

Performance Indicators:

- Number of trainings held
  - Number of people attending trainings
  - Increase in number of grant applications
- 

**C. Diversify and sustain funding for the Consortium.**

Performance Indicator:

- Consortium members collaborate to successfully secure at least one grant
- 

**7. Strengthen existing asthma coalitions in sustaining partnerships and implementation of activities.**

Strategies:

**A. Provide technical assistance in coalition development and program activities to local coalitions.**

Performance Indicators:

- Number of technical assistance activities provided
  - Record of coalition attendance
  - Coalitions expand program activities in local communities
-

**B. Increase and diversify funding for asthma coalitions in Michigan.**

Performance Indicators:

- Coalition funding is stable
  - Each coalition will achieve a diverse funding base
- 

**C. Diversify and sustain coalition membership.**

Performance Indicators:

- Active coalition membership as evidenced by 75% attendance at all meetings
  - Coalition membership is representative of the community being served
- 

**8. Promote asthma activities and resources in communities without a coalition.**

Strategies:

**A. Select and post a core set of asthma programs on the GetAsthmaHelp.org website.**

Performance Indicator:

- Core set of asthma programs selected and posted on website
- 

**B. Coalitions provide targeted activities outside their service area.**

Performance Indicator:

- Number of AIM activities in non-coalition areas provided by coalition members
- 

**C. Promote asthma resources to key staff from local agencies.**

Performance Indicator:

- Local agencies receive asthma resources
- 

**D. Work with public and private third party payers and other clinical/allied health partners to promote and/or provide professional/member education opportunities.**

Performance Indicators:

- Professional educational opportunities offered
  - Number of member education opportunities offered
-

## Goal 4: IMPROVING SYSTEMS OF ASTHMA CARE.

Asthma is a complex disease to manage. Many factors affect whether the patient will avoid the emergency department, hospitalization, missed school and work days, and/or overuse their short-term controller medication. Unfortunately, many of these factors are due to the structure of the health care system where people with asthma receive their care.

The health care system that treats chronic diseases was designed to address illnesses that are acute and short-lived, specifically infections and injury. Many times, when decisions are made regarding the treatment of chronic disease, there is little consultation with the patient. A health care system designed on an acute care model lacks the coordination and follow-up to successfully manage chronic diseases.

In the current system of asthma care, many physicians do not treat asthma according to NHLBI guidelines. In addition, the patient may not receive adequate education due to the health care provider's lack of time during the visit, or because a certified asthma educator does not give the education. If the asthma educator is certified, this comprehensive care is not consistently reimbursed.

Additionally, many primary care office procedures are not properly addressing asthma patients, i.e., trigger avoidance control, spirometry use, asthma action plans and appropriate medications. In the acute care system, some emergency departments are not providing complete and consistent discharge instructions, including a lack of inhaled corticosteroids prescribed at discharge. There can also be a lack of integration between the primary care office and pharmacy, school, work, urgent care clinics, emergency department, inpatient settings and specialists. All of these factors can interfere with the care someone with asthma receives, thus impacting the management of their asthma.

Implementation of this goal will result in successful asthma management that includes an improved coordination of care and follow-up. In addition, there will be an increase in physician and allied health expertise, more policies reflecting the NHLBI guidelines, a larger number of reminder systems used by physicians, greater consistency across providers and within practices, and effectively taught patient self-management techniques.

## Goal 4: Objectives

### 1. Improve Michigan's primary care system to achieve optimal asthma management.

#### Strategies:

#### **A. Improve asthma knowledge and competency of health care practitioners, with a high priority on those serving disparate populations.**

##### Performance Indicators:

- Increase the number of practitioners with adequate asthma education
- Increase the number of primary care physicians educated serving populations with asthma disparities in coalition covered areas

- Increase the number of primary care physicians serving populations with asthma disparities in non-coalition covered areas educated
- 

■

**B. Increase the number of certified asthma educators in Michigan to 1000 by 2010 and encourage coverage across the state.**

Performance Indicator:

- Increase the number of asthma educators certified by region of the state
- 

■

**C. Increase access to appropriate asthma case management for at risk patients, including in home asthma case management for high-risk patients, with an emphasis on low-income populations.**

Performance Indicator:

- Increase the number of high-risk patients with insurance receiving case management services
- 

■

**D. Set primary care office procedures to appropriate asthma care default, including prescriptions for inhaled corticosteroids for all patients with persistent asthma, written asthma management plans, appropriate specialist referral and minimum spirometry.**

Performance Indicators:

- Increase in asthma management plan usage
  - Increase in spirometry use
  - Increase percentage of people with persistent asthma on appropriate medications
- 

■

## **2. Improve Michigan's acute care system to achieve optimal asthma management.**

### Strategy:

**A. Improve completeness and consistency of patient discharge instructions from the emergency department and inpatient settings.**

Performance Indicators:

- Increase number of emergency department and inpatient facilities providing complete and consistent discharge instructions
  - Increase the percentage of people with persistent asthma who have inhaled corticosteroid prescriptions upon discharge
  - Increase the percentage of people with asthma who have adequate oral steroid dosage upon discharge
-

### **3. Improve integration of asthma care in Michigan.**

#### Strategies:

#### **A. Provide the physician information about the patient's pharmacy utilization.**

##### Performance Indicators:

- Increase in appropriate medication prescription/dispensing events for those with persistent asthma
  - Decrease in the use of quick-relief medication for those with persistent asthma
- 

#### **B. Improve health care practitioner notification regarding asthma care received by their patients in emergency department and inpatient settings.**

##### Performance Indicator:

- A primary care physician notification system is developed
- 

### **4. Promote reimbursement of comprehensive asthma care in Michigan.**

#### Strategies:

#### **A. Reimburse for appropriate asthma case management for at risk patients, including in home asthma case management services for high-risk patients.**

##### Performance Indicator:

- Increase the number of public/private third party payers that reimburse for appropriate asthma case management for at risk patients, including in home asthma case management services for high-risk patients
- 

#### **B. Reimburse for patient education by certified asthma educators in all settings.**

##### Performance Indicator:

- Increase number of public/private third party payers who reimburse for patient education by certified asthma educators in all settings
-

## **Goal 5:** REDUCE BARRIERS TO SELF-MANAGEMENT IN PEOPLE WITH ASTHMA.

People with asthma in Michigan, including children in child care settings and schools, do not have appropriate support systems to allow for effective self-management of their condition. Difficulty in accessing inhalers and nebulizers during an asthma attack have dramatically increased physician and emergency department visits resulting in missed school and work days.

Policies are needed to support effective asthma management for people with asthma, and consistently monitor implementation of those policies within day care settings and schools. The absence of sufficient policies that enforce smoke free environments increases the likelihood of dangerous asthma exacerbations, and the risk of untrained response practices. Meeting the needs of individuals with asthma requires improved environments in all settings. Individuals at child care settings, work, schools, correction centers, foster care and the like need to be protected from asthma-related triggers and supported by a healthier environment.

The outcome of this goal will be the prevention of severe asthma attacks by implementation of approved and individualized physician-directed action plans, adequate access to asthma medications, and policies that promote trigger-free environments. Training of administrators and personnel will reinforce consistent implementation of asthma-friendly policies and standards of asthma management. Policy implementation is expected to reduce the number of missed school and work days.

## **Goal 5: Objectives**

### **1. Promote development and implementation of asthma-friendly policies in schools.**

#### Strategies:

#### **A. Develop a statewide partnership to address asthma in schools.**

##### Performance Indicator:

- Statewide and local school-based health initiatives
- 

#### **B. Facilitate implementation of asthma inhaler law and State Board of Education Asthma Management Policy and other asthma-friendly policies in all Michigan schools.**

##### Performance Indicator:

- All schools in Michigan will have systems and policies in place to support implementation of the inhaler law
-

## 2. Improve asthma management in the childcare setting.

### Strategy:

#### **A. Increase the number of childcare personnel who have been trained in appropriate responses for asthma management.**

##### Performance Indicators:

- Increased percentage of children in day care settings with asthma action plans on file
- Increased percentage of children in day care settings with quick-relief medication on site
- Number of day care staff trainings provided
- Increase the number of licensed day care centers that require prescribed quick-relief medication to be on site for each child with asthma
- Increase the number of licensed day care centers that require a written, physician-directed asthma action plan for all children with asthma

## **Goal 6: REDUCE EXPOSURE TO ENVIRONMENTAL FACTORS THAT CAUSE AND/OR EXACERBATE ASTHMA**

Environmental allergens and irritants found in both indoor and outdoor environments can exacerbate (or trigger) pre-existing asthma and, with certain exposures, cause the development of asthma. Persons with asthma should attempt to avoid exposure to these asthma triggers in order to control their disease. Unfortunately, avoidance is not always an individual-level activity, but can require more extensive system level approaches to monitor the presence of triggers, understand their impact, and develop effective interventions. The present challenge for health care professionals is to incorporate an assessment of the specific sources of triggers that may be present in an individual's home, school, childcare, and work environments into their standards of care and treatment of persons with asthma. Likewise, families with asthma must assess asthma triggers in the home and school. Childcare and workplace personnel must assess trigger exposure to students, young children, and employees respectively.

The objectives of Goal 6 are expected to (1) decrease exposure to outdoor air pollutants associated with asthma exacerbations including exposure to mobile source diesel emissions and specific criteria air pollutants, including particulate matter less than or equal to 2.5 micrometers and ozone; (2) increase the capacity of people with asthma to identify, avoid, and reduce exposures in homes, schools, childcare settings, and work places that exacerbate pre-existing asthma or cause the development of asthma; and (3) reduce secondhand smoke exposure and promote tobacco cessation for people with asthma and parents of children with asthma who smoke.

## Goal 6: Objectives

### 1. Identify and increase the number of school districts and municipalities that have initiatives or policies to decrease mobile source diesel emissions.

#### Strategies:

#### **A. Encourage schools and school districts to use the Environmental Protection Agency Clean School Bus USA guidelines.**

##### Performance Indicator:

- Increase the number of schools/districts that have initiatives or policies, and/or use EPA Initiative guidelines
- 

#### **B. Encourage changes in policies of local municipalities to decrease exposure to diesel emissions.**

##### Performance Indicators:

- Increase the number of local municipalities with diesel emissions policies
  - Increase the number of partnerships with other organizations and government agencies regarding diesel emissions
- 

### 2. Reduce the effects of exposure to specific criteria air pollutants, including particulate matter less than or equal to 2.5 micrometers and ozone, among people with asthma.

#### Strategies:

#### **A. Support efforts by the Michigan Department of Environmental Quality (DEQ) to attain the new National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter.**

##### Performance Indicator:

- Attainment of new NAAQS for ozone and particulate matter
-

**B. Increase awareness among people with asthma regarding information on outdoor air quality and asthma.**

Performance Indicators:

- Increase the number of hits to the Air Quality Index (AQI) page on both the DEQ and AIM websites and the DEQ Ozone Action! Day Advisories and EnviroFlash websites
  - Increase the number of EnviroFlash subscriptions for Michigan cities
  - Increase the number of AQI fact sheets distributed
- 

**3. Increase the capacity of people with asthma to identify, avoid, and reduce exposure to indoor environmental asthma triggers.**

Strategies:

**A. Assess federal, state, and local governmental Indoor Air Quality policies and guidelines that potentially affect exposure to indoor environmental asthma triggers and determine if changes are necessary (e.g., U.S. Department of Housing and Urban Development policies).**

Performance Indicators:

- Number of policies and guidelines assessed
  - Number of suggested changes submitted to appropriate governmental agencies
- 

**B. Encourage reimbursement for in-home environmental trigger education and assessment programs from public and private third party payers.**

Performance Indicator:

- Increase in the number of payers reimbursing for in-home programs
- 

**C. Increase knowledge of indoor environmental asthma triggers among indoor air professionals, including building inspectors, indoor air consultants, and local public health practitioners.**

Performance Indicators:

- Increase in the number of local public health practitioners trained in asthma issues
  - Increase in the number of indoor air quality professionals trained
- 

**D. Compile and distribute educational materials regarding building and maintaining healthy, asthma-friendly homes to developers, homebuilders, architects, home inspectors, etc.**

Performance Indicator:

- Number of informational packets delivered

## **4. Increase the capacity of schools and childcare settings to identify, avoid, and reduce exposure to environmental asthma triggers.**

### Strategies:

#### **A. Offer indoor air quality training to schools.**

##### Performance Indicators:

- Increase in the number of local coalitions and organizations offering air quality training
  - Increase in the number of schools trained to use the EPA Indoor Air Quality Tools for Schools Action Kit
  - Increase in the number of schools that appropriately address asthma trigger identification and control in their policies
- 

#### **B. Offer indoor air quality training in childcare settings.**

##### Performance Indicators:

- Increase in the number of childcare settings with trained staff
  - Increase in the number of childcare settings in which asthma trigger identification and control are appropriately addressed in their policies
- 

## **5. Improve the capacity of health care professionals to identify work-related asthma.**

### Strategies:

#### **A. Incorporate work-related asthma informational materials into professional education interventions.**

##### Performance Indicator:

- Increase in the number of healthcare providers reporting suspected work-related asthma cases
- 

#### **B. Raise awareness of work-related asthma among health care professionals.**

##### Performance Indicator:

- Number of presentations given
-

## **6. Increase the capacity of employees, employers, unions, and Michigan Occupational Safety and Health Administration (MIOSHA) safety and health officers to identify and control exposures to work-related asthma sensitizers.**

### Strategies:

#### **A. Provide training on work-related asthma for health and safety representatives of MIOSHA.**

##### Performance Indicator:

- Increase in the number of work-related asthma investigations completed by MIOSHA
- 

#### **B. Provide training to health and safety representatives for both labor and management on occupational asthma-causing agents.**

##### Performance Indicators:

- Number of training sessions provided and number of people trained at each company
  - Number of brochures on cleaning agents and asthma distributed
- 

#### **C. Distribute information on medical surveillance to employers during MIOSHA inspections. Share information on IAQ and mold when indoor air issues at companies are involved.**

##### Performance Indicator:

- Increase in the number of companies receiving information on medical surveillance, IAQ, and mold
- 

#### **D. Distribute work-related asthma materials to unions, employers, employees, and health care providers during conferences and through other media, such as newsletters and trade association publications.**

##### Performance Indicators:

- Increase in the number of conferences attended in which work-related materials are distributed
  - Increase in the number of publications in which information is presented
- 

## **7. Provide work-related asthma resources to groups that are attempting to improve occupational air standards.**

### Strategies:

#### **A. Assess employer compliance with Michigan air standards and other applicable occupational safety and health laws.**

##### Performance Indicator:

- Number of investigated work-related asthma cases

**B. Support Michigan Occupational Health Standards Committee recommendations for new or revised Michigan air standards.**

Performance Indicator:

- Number of recommendations proposed
- 

**8. Promote evidence-based strategies that reduce secondhand smoke exposure.**

Strategies:

**A. Support efforts to implement twenty-four hours per day, seven days per week campus-wide tobacco free policies in all public and private elementary, middle, and high schools.**

Performance Indicator:

- 100% of all public and private schools with twenty-four hours per day seven days per week tobacco free campus policies
- 

**B. Support efforts to implement smoke free policies in all work sites and public places.**

Performance Indicator:

- 100% of all private and public worksites with smoke free policies
- 

**C. Support efforts to implement smoke free policies in all restaurants and bars.**

Performance Indicator:

- All restaurants and bars with smoke free policies
- 

**D. Support interventions for smoke free college campus policies.**

Performance Indicator:

- Increase in the number of four-year public and private college campuses/universities with smoke free dorms
- 

**E. Collaborate with media campaigns to promote awareness of the relationship between secondhand smoke and asthma.**

Performance Indicators:

- Number of people reached as a result of media campaign
  - Number of calls for informational materials resulting from media campaigns
-

## **9. Promote cessation support for people with asthma and parents of people with asthma who smoke.**

### Strategies:

#### **A. Promote the State of Michigan Quit Line in AIM communications and activities.**

##### Performance Indicator:

- Number of calls to Quit Line generated by AIM activities
- 

#### **B. Promote local cessation services, nicotine replacement therapy, and quit kits in communications, etc. for caregivers.**

##### Performance Indicators:

- Increase in the number of calls to the Quit Line
  - Number of media campaigns incorporating asthma awareness
- 

#### **C. Implement 5 A's (Ask, Advise, Assess, Assist, and Arrange) in primary care provider offices by incorporating into existing AIM provider educational activities.**

##### Performance Indicator:

- Number of asthma activities incorporated
-

# List of Participants

## Michigan Asthma Advisory Committee

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**Karen Gray, BSChE**, Member, Board of Directors, Asthma & Allergy Foundation of America-Mich. Chapter  
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# Glossary

**AIR Course:** Asthma Information Review Course

**Asthma Action/Management Plan:** A written plan that tells people with asthma, or those who care for them, how to take care of asthma symptoms. This includes what to do every day to prevent symptoms, and also what to do if symptoms are very bad, or severe. This plan should be developed together with a health care provider and family members. When used properly, the plan can help people control their asthma.

**Asthma Friendly Policy:** Policies that promote asthma-friendly communities – where people with asthma are quickly and accurately diagnosed, receive appropriate treatment, and are safe from physical and social environmental risks that exacerbate asthma.

**Asthma Trigger:** Things that start asthma symptoms. Each person with asthma can have different triggers. Some common asthma triggers are dust, pollen and pet dander.

**Certified Asthma Educator:** A licensed or credentialed health care professional or an individual providing asthma education, counseling or coordination services with a minimum of 1,000 hours experience in these activities who has been certified by the National Asthma Education Certification Board ([www.naecb.org](http://www.naecb.org)).

**Criteria Air Pollutant:** The Environmental Protection Agency (EPA) Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for six principal pollutants, which are called "criteria" pollutants. They include carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur oxides. EPA has set National Ambient Air Quality Standards for criteria air pollutants because they are considered harmful to the public health and the environment. (<http://www.epa.gov/air/criteria.html>, Accession Date: 02.01.2005)

**Disparity:** A chain of events signified by a difference in environment; access to, utilization of, and quality of care; health status; or a particular health outcome that deserves scrutiny.

**Evidence-based:** pertaining to the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.

**Health Care Practitioner:** An individual physician or allied health professional.

**Healthy People 2010:** Sponsored by the U.S. Department of Health and Human Services, the *Healthy People 2010* initiative is a comprehensive set of disease prevention and health promotion objectives for the nation to achieve over the first decade of the new century. Created by scientists both inside and outside of government, it identifies a wide range of public health priorities and specific, measurable objectives. It can be used by many different people, states, communities, professional organizations, and others to help them develop programs to improve health.

**Inhaled Corticosteroid:** A medication that is breathed in to help people with asthma get rid of the inflammation that causes asthma symptoms. The corticosteroids in an inhaler are a lot like those made naturally in the body.

**Logic Model:** A logic model is a systematic and visual way to present and share an understanding of the relationship among the resources available to operate a program, the activities planned, and the changes or results desired. (Adapted from: *Using Logic Models to Bring Together Planning, Evaluation, & Action, Logic Model Development Guide*, W.K. Kellogg Foundation, Dec. 2001, <http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf>)

**Medicaid:** A program in the United States jointly funded by the states and the federal government that reimburses hospitals and physicians for providing care to qualifying people who cannot finance their own medical expenses.

**Metered Dose Inhaler:** A device that releases a pre-measured amount of medication into the air. In general, they have a part that holds the medication and a propellant that turns the medication into a fine mist. Push down on the canister to force the medication out through the mouthpiece.

**Michigan Asthma Inhaler Law:** A state law (Michigan Compiled Law 380.1179) that allows Michigan public and nonpublic school children, under certain conditions, to carry and self-administer prescribed asthma and allergy medications on school grounds and during school-sponsored activities. This legislation amended the Michigan School Code to ensure that students with asthma and allergies have immediate access to life-saving medications.

**Peak Flow Meter:** A hand-held plastic tool to help people with asthma measure how fast they can blow out, known as their peak expiratory flow.

**Primary Care:** Care which provides integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community. (JAMA 1995;273(3):192)

**Secondhand Smoke:** Secondhand smoke, also known as environmental tobacco smoke (ETS), consists of exhaled smoke from smokers and side stream smoke from the burning end of a cigarette, cigar or pipe. Secondhand smoke contains more than 4,000 substances, including over 40 compounds that are known carcinogens.

**Socioeconomic:** A combination of social and economic factors, such as race, gender, income, and education.

**Spacer:** A tube-shaped tool that can be attached to an inhaler to help more medication get down into the lungs. Push down on the inhaler and a cloud of medicine goes into the tube. It holds the medicine long enough for one or two slow, deep breaths.

**Spirometry:** A pulmonary function test that measures how much air is inhaled (breathe in) and exhaled (breathe out) as well as speed of exhalation. Spirometry is a very common test to help patients and doctors understand asthma better, and check how it is improving with treatment.

**Surveillance:** Surveillance is the ongoing systematic collection, analysis, interpretation, and timely dissemination of health data. The purpose of a surveillance system is to monitor trends in the disease and its management in order to prevent or better control the disease within the population. (Teutsch SM and Churchill RE. *Principles and Practice of Public Health Surveillance*. New York, NY: Oxford University Press, 1994.)

**Work-related Asthma:** Work-related asthma is asthma caused by exposures at work. It can also be existing asthma made worse by exposures at work.



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